



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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AIR AND RADIATION
DIVISION

May 21, 2020

Mr. Ali Mirzakhali
Air Quality Division Administrator
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, Oregon 97232-4100

Dear Mr. Mirzakhali:

This letter is in response to the Oregon Department of Environmental Quality submission sent June 24, 2019, regarding the elevated 24-hour PM_{2.5} concentrations measured at the monitoring sites in Klamath Falls, Oregon and Oakridge, Oregon between August 17, 2017 and September 16, 2017. The Oregon DEQ has requested that the U.S. Environmental Protection Agency concur that elevated PM_{2.5} concentrations on five days at the Klamath Falls monitoring station (AQS site number 41-035-0004) and six days at the Oakridge monitoring station (AQS site number 41-039-2013) in August and September 2017, were caused by exceptional events due to wildfires in Oregon, Washington, Idaho, Montana, California, and British Columbia, and Alberta, Canada.

In 2016, the EPA revised the Exceptional Events Rule found in 40 CFR 50.14 and 51.930. See "Treatment of Data Influenced by Exceptional Events" rule (81 FR 68216, October 3, 2016) ("Exceptional Events Rule"). The 2016 rule revisions at 40 CFR 50.14(a)(1)(i) limit the applicability of the Exceptional Event Rule to exceedances or violations of the National Ambient Air Quality Standards that have relevance to specific regulatory determinations by the EPA, or otherwise as approved by the EPA administrator on a case-by-case basis. After careful consideration of the information provided, we concur, based on the weight of evidence, that Oregon DEQ has made the demonstrations referred to in 40 CFR 50.14(a)(2) and (b)(1) for a limited subset of days included in Oregon DEQ's request. The Oregon DEQ has met the schedule and procedural requirements in 40 CFR 50.14(c) with respect to the same information; however, only some of the requested days currently meet the regulatory significance requirement.

The EPA has reviewed the documentation provided by Oregon DEQ to demonstrate that the following elevated PM_{2.5} concentrations in 2017 meet the criteria for an exceptional event in the Exceptional Event Rule:

- Klamath Falls monitoring station: August 29 and September 4
- Oakridge monitoring station: August 26, 29 and September 1, 4, 7, 16

The basis for our concurrence is set forth in the enclosed technical support document. My staff has entered or will shortly enter a “concurrence flag” for this data into the EPA’s Air Quality System data repository. The EPA will retain the Oregon DEQ’s demonstration for August 17, August 20, August 23, August 26, and September 1, 2017, at the Klamath Falls monitoring station for future consideration should this data become significant for a future regulatory action.

The EPA’s concurrence is a preliminary step in the regulatory process for actions that may rely on the dataset containing the event-influenced data and does not constitute final agency action. When the EPA takes a regulatory action that is affected by exclusion of the PM_{2.5} data for the exceedances that occurred at the Klamath Falls monitoring station on August 29 and September 4, 2017, and at the Oakridge monitoring station on August 26 and 29, 2017, and September 1, 4, 7, and 16, 2017, the EPA intends to publish notice of its proposed action in the Federal Register. The EPA’s concurrence letter and accompanying technical support document will be included in the record as part of the technical basis for that proposal. When the EPA issues that regulatory action, it will be a final agency action subject to judicial review.

Thank you for the Oregon DEQ’s submission of this exceptional event documentation. If you have any questions or wish to discuss this matter further, please contact me or have your staff contact Matthew Jentgen, Air Planning Section, Division of Air and Radiation, at (206) 553-0340.

Sincerely,

Krishna Viswanathan
Director

Enclosure

cc: Mr. Michael Orman
Oregon DEQ

Ms. D Pei Wu
Oregon DEQ

Mr. Anthony Barnack
Oregon DEQ

**EPA, Region 10
Technical Support Document**

**Review of Exceptional Event Request
Klamath Falls, OR and Oakridge, OR
PM_{2.5} NAAQS**

Dates Analyzed: August 17, 20, 23, 26, and 29, 2017; September 1, 4, 7, and 16, 2017

Background

On October 3, 2016, the U.S. Environmental Protection Agency published a final rule, *Treatment of Data Influenced by Exceptional Events*, with an effective date of September 30, 2016 (Exceptional Events Rule or EER at 81 FR 68216). The 2016 Exceptional Events Rule governs the review and handling of certain air quality monitoring data for which the normal planning and regulatory processes are not appropriate and revises the rule initially adopted by the EPA on March 22, 2007, (72 FR 13560). Under the Exceptional Events Rule, the EPA may exclude data from use in determinations of National Ambient Air Quality Standard (NAAQS) exceedances and violations if a state demonstrates that an “exceptional event” caused the exceedances. Before the EPA can exclude data from these regulatory determinations, the state must notify the Administrator of its intent to exclude data by flagging the data in the EPA’s Air Quality System database and engaging in the initial notification process. Then, after notice and opportunity for public comment at the state level, the state must submit a demonstration to justify the exclusion. After considering the weight of evidence provided in the demonstration, the EPA decides whether the requirements for concurring on the flag have been met. Final action on the data exclusion does not occur until it is acted upon as part of a final regulatory action subject to public notice and comment.

Oregon Department of Environmental Quality Request

The Oregon DEQ requested concurrence on flagged 24-hour PM_{2.5} concentrations that occurred for specific days between August 17, 2017 and September 16, 2017, at the Klamath Falls, Oregon monitoring station (AQS site number 41-035-0004) and the Oakridge, Oregon monitoring station (AQS site number 41-039-2013). The recorded PM_{2.5} concentrations for which Oregon DEQ requests the EPA’s concurrence are shown in Table 1.

Table 1. PM_{2.5} concentrations for which the Oregon DEQ requests the EPA’s concurrence

Date	PM_{2.5} Concentration (µg/m³) Klamath Falls, AQS # 41-035-0004	PM_{2.5} Concentration (µg/m³) Oakridge, AQS # 41-039-2013
8/17/2017	34.6	
8/20/2017	55.1	
8/23/2017	32.7	
8/26/2017	44.7	42.2
8/29/2017	69.3	88.5
9/1/2017	55.6	86.2

9/4/2017	102.0	200.0
9/7/2017		66.9
9/16/2017		40.3

The Oregon DEQ flagged the monitored values as due to a wildland fire exceptional event. The agency made the documentation available for public comment for 30 days starting on April 19, 2019. The comment period closed on May 20, 2019, and Oregon DEQ did not receive any comments. The Oregon DEQ submitted the exceptional event demonstration package to the EPA on June 24, 2019. The Oregon DEQ requests concurrence from the EPA for the flagged days, based on the Oregon DEQ's conclusion that the dates at the Klamath Falls and Oakridge monitoring stations have regulatory significance with regard to the PM_{2.5} 24-hour standard and the criteria for submission of a 10-year maintenance plan.

The EPA's Exceptional Event Evaluation

The EPA agrees with the Oregon DEQ that the PM_{2.5} exceedances at the Klamath Falls monitoring station on August 29 and September 4, 2017, and at the Oakridge monitoring station on August 26, and 29, 2017, and September 1, 4, 7, and 16, 2017, have regulatory significance for purposes of the Klamath Falls and Oakridge PM_{2.5} initial 10-year maintenance plans, respectively. However, after evaluating the criteria in the Exceptional Events Rule, the EPA determined that the remaining event-influenced days at the Klamath Falls monitoring station do not have regulatory significance and will not be evaluated as due to wildfire exceptional events in this action. The 2016 rule revisions at 40 CFR 50.14(a)(1)(i) limit the applicability of the Exceptional Events Rule to NAAQS exceedances or violations that have relevance to specific regulatory determinations by the EPA or otherwise as approved by the EPA administrator on a case-by-case basis. The relevant NAAQS regulatory standard for this request is the 24-hour PM_{2.5} three-year design value of 35 µg/m³. As noted in the table below, the PM_{2.5} values on August 17, 20, 23, and 26, 2017, and September 1, 2017, at the Klamath Falls monitoring station do not have regulatory significance at this time because the area attains the PM_{2.5} NAAQS once the August 29 and September 4, 2017 data, as well as the 11 wildfire days in 2018 that have been flagged by the State for Exceptional Events, are excluded from consideration.

Table 2. PM_{2.5} concentrations that have regulatory significance

Date	PM_{2.5} Concentration (µg/m³) Klamath Falls, AQS # 41-035-0004	PM_{2.5} Concentration (µg/m³) Oakridge, AQS # 41-039-2013
8/26/2017		42.2
8/29/2017	69.3	88.5
9/1/2017		86.2
9/4/2017	102.0	200.0
9/7/2017		66.9
9/16/2017		40.3
<i>2015-17 Design Value (24-hr PM_{2.5}) with days above excluded</i>	32	29
<i>2016-18 Design Value (24-hr</i>	32*	30

<i>PM_{2.5}) with days above excluded</i>		
<i>2017-19 Design Value (24-hr PM_{2.5}) with days above excluded</i>	35*	35
<i>*Also excludes 11 wildfire days in 2018 that have been flagged by the State for Exceptional Events</i>		

Below is a summary of the requirements of the Exceptional Events Rule and a description of how the Oregon DEQ met each requirement. All references to page numbers, tables, and figures relate to the Oregon DEQ's June 24, 2019 submission.

Procedural requirements

- **The state must notify the EPA of its intent to request exclusion of data as due to an exceptional event by creating an initial event description, flagging the associated data in the EPA's AQS database, and engaging in the Initial Notification of Potential Exceptional Event Process. 40 CFR 50.14(c)(2)(i).**

The Oregon DEQ flagged and described the 24-hour PM_{2.5} values that occurred on days between August 17, 2017 and September 16, 2017, as due to wildland fire exceptional events in the EPA's AQS database. The Oregon DEQ met the Exceptional Event Initial Notification requirements through multiple EPA – the Oregon DEQ calls since December 2017 and the Oregon DEQ's participation in the EPA Region 10 Annual Exceptional Events teleconference on May 21, 2019. Thus, the Oregon DEQ has met the Initial Notification and Flagging requirements for this demonstration.

- **The public had an opportunity to review and comment on the demonstration justifying data exclusion; any public comments received by the Oregon DEQ were included in the demonstration; and the demonstration addresses those comments disputing or contradicting factual evidence provided in the demonstration. 40 CFR 50.14(c)(3)(v).**

The Oregon DEQ provided a 30-day public comment period on the documentation for the claimed exceptional events. The public comment period ran from April 19, 2019 to May 20, 2019. The Oregon DEQ did not receive any comments during the public comment period. Thus, the Oregon DEQ has met the public comment requirements for this demonstration.

Technical Criteria

- **The demonstration includes a narrative conceptual model that describes the event as provided in 40 CFR 50.14(c)(3)(iv)(A).**

The Oregon DEQ explained that in 2017 there were extensive wildfires occurring throughout Oregon, Washington, Montana, California, and parts of Canada. Figure 1 of the Oregon DEQ submission displays the total acres burned in Oregon during 2017 compared to previous years. The Oregon DEQ noted that temperatures across the Northwest geographic area began warming above average in spring of 2017 even as precipitation continued across much of the area. Precipitation declined significantly after mid-June, but temperatures continued to climb. As shown in Figure 2 of the Oregon DEQ submission, temperatures continued to warm through July and peaked in August. July temperatures were well above

average for much of the Western U.S. while August of 2017 proved to be the warmest August on record for a number of climate zones in Oregon, Washington and Northern California.

The Oregon DEQ also observed that the upward change in temperature followed by the lack of precipitation after June created a “flash drought” condition. Flash droughts develop very quickly with little or no warning that a drought is developing. The wet winter and spring combined with warm temperatures resulted in significant plant growth but as the precipitation dwindled and temperatures began to climb, the atmospheric demand for water resulted in very high evapotranspiration. Drought stress set in for live fuels such as trees and shrubs as well as dead material. Over the three-month period between June and September, the equivalent of extreme drought developed over the forests of the Northwest, as seen in Figure 3. In early and mid-August, especially from August 9-11, 2017, a period of extreme heat with temperatures in the 100s was followed by storms and lightening, which caused the vast bulk of the August and September fires that year.

There were a number of large-scale wildfires occurring in Oregon during August and September 2017. Oregon DEQ noted that lightning-caused fires burned 64,072 acres out of the 64,074 total acres burned in the 2017 fire season in the Umpqua National Forest area. As of August 14, the Umpqua North Complex fires Happy Dog and Fall Creek were major priorities for the area. The Chetco Bar fire in southwest Oregon also grew significantly during this time.

North of the Umpqua National Forest, fires in the Willamette National Forest burned over 75,000 acres during the 2017 fire season. Slightly north of the Oakridge monitor, the Jones fire and Horse Creek Complex of fires (Avenue, Roney, Separation, Nash, Olallie, and Rebel) both started on August 10, 2017, caused by lightning. The Milli Fire, northwest of the Oakridge monitor, in the Deschutes National Forest started on August 11, and burned until September 24, 2017, burning over 24,000 acres. The Horse Creek Complex of fires was contained by September 27, 2017, while the Jones fire was not contained until mid-October.

Klamath Falls is located in south central Oregon at an elevation of 4,105 feet. According to the Oregon DEQ’s submittal, the Klamath Basin is a relatively flat area of an old high elevation lakebed that is drained by the Klamath River. Occasional hills and a system of elongated ridges confine the basin and the greater Klamath Falls area to the east and west. Because of these features, Klamath Falls can experience very strong and shallow nighttime inversions that break up with daytime solar heating. According to Oregon DEQ, the wildfire smoke events affecting the Klamath Falls area were primarily from fires in the Umpqua North Complex and the High Cascades Complex, which were northwest of Klamath Falls. Fires in southwest Oregon (Miller Complex, Chetco Bar) and California (Eclipse Complex, Salmon-August Complex) also increased PM_{2.5} levels in Klamath Falls. The west and northwest wind direction in late August and early September transported the smoke from these fires to the Klamath area, as depicted in Figures 9A-D and 11A-D of the Oregon DEQ submission.

The Oakridge community in Lane County, Oregon, is a forest-oriented community in a valley of the Middle Fork Willamette River in the foothills of the Cascade Mountains about 45 miles southeast of Eugene-Springfield. According to Oregon DEQ, the wildfire smoke events affecting the Oakridge area were primarily from fires in the Umpqua North Complex and High Cascades Complex. Smoke from northern fires (Horse Creek Complex and Willamette forest fires) also contributed to elevated PM_{2.5} levels. The west and southwest winds occurring in late August and early September transported smoke from the large wildfires in southern Oregon to the Oakridge monitor, as depicted in Figures 13A-D, 14A-C, 15A-D, 16A-C, 17A-C, and 18A-D of the Oregon DEQ submission.

The Oregon DEQ's submission provides a detailed description of the claimed exceptional events, with multiple wildfires occurring throughout the Western U.S., including large fires nearby Klamath Falls and Oakridge, and meteorological conditions which allowed for the transport and build-up of PM_{2.5} from these extensive wildfires. The submitted demonstration satisfies the conceptual model criteria.

- **The event meets the definition of a “wildfire” in 40 CFR 50.1(n). Also, the event satisfies the “unlikely to recur at a particular location or a natural event” criteria in 40 CFR 50.1(k); 40 CFR 50.1(n); 40 CFR 50.1(o); 40 CFR 51.14(c)(iv)(E).**

A “wildfire” is defined in the Exceptional Events Rule as “any fire started by an unplanned ignition caused by lightning; volcanoes; other acts of nature; unauthorized activity; or accidental, human-caused actions, or a prescribed fire that has developed into a wildfire. A wildfire that predominantly occurs on wildland is a natural event.” “Wildland” is defined as an area in which human activity and development are essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.” A “natural event” is described as “an event and its resulting emissions, which may recur at the same location, in which human activity plays little or no direct causal role.” See 40 CFR 50.1.

The Oregon DEQ's submission explains that the “natural events” were extensive wildfires occurring throughout the Western U.S. and Canada primarily caused by lightning storms. As seen in Figure 4 of the Oregon DEQ submission, these large wildfire incidents were occurring in forested areas with minimal human activity and development and, therefore, meet the definition of wildland. Additionally, the Oregon DEQ noted that the fires in 2017 were largely due to lightning strikes after a wet spring that saw rapid growth of understory woody and herbal plant material, followed by record-breaking hot and dry summer season that converted this new, thin growth into fuel. The Oregon DEQ evaluated other source category emissions, including prescribed fires, agriculture burning, residential wood combustion, open burning, and vehicle emissions. The Oregon DEQ notes that there were no prescribed fires in the Klamath Falls or Oakridge areas during the impacted monitor days and open burning was also not permitted during the time period in question. The Oregon DEQ further states that residential wood combustion would likely not occur due to the high temperatures in Klamath Falls and Oakridge during the time period in question. Also, vehicle emissions and road dust were not likely contributors on the event days because of the relatively small amount of emissions resulting from vehicle traffic in these rural areas.

The Oregon DEQ's submission supports the conclusion that the event meets the definition of a “wildfire” and these events were wildfires that occurred on “wildland.” Thus, these events also meet the definition of a “natural event” in the Exceptional Events Rule.

- **The event satisfies the “clear causal relationship” criteria in 40 CFR 50.1(j); 40 CFR 50.14(c)(3)(iv)(B).**

As part of assessing a clear causal relationship, the Oregon DEQ provided monitoring data to demonstrate that air quality data was affected at the Klamath Falls and Oakridge monitoring stations on the days in question (Figures 9A, 11A, and 13A-18A of Oregon DEQ submission). Then to demonstrate a clear causal relationship between the wildfire event and the elevated PM_{2.5} concentrations at the monitoring station, the Oregon DEQ examined meteorology, satellite data, back trajectories, and time series data for the period between late August and early September in Klamath Falls and Oakridge.

For Klamath Falls on August 29, 2017, winds were primarily from the northwest and PM_{2.5} concentrations hovered around 100 µg/m³ throughout the morning, peaking at 9am. The smoke and PM_{2.5} concentrations were lower in the afternoon due to a change in wind direction, then a wind shift to the northwest increased PM_{2.5} concentrations by the evening hours. The MODIS satellite image in Figure 9B shows the smoke concentrations to the west of the Klamath Falls monitor, and the wind roses in Figures 9C and 9D emphasize the northwest wind direction that day. On September 4, 2017, PM_{2.5} concentrations rose well above 100 µg/m³ throughout the morning, after which the wind direction finally shifted in the afternoon hours, slightly lowering PM_{2.5} concentrations to around 50 µg/m³. The MODIS satellite image in Figure 11B show considerable smoke concentrations around the Klamath Falls monitor, while the HYSPLIT back trajectory in Figure 11C and the wind rose in Figure 11D indicate the wind was pushing the smoke from the wildfire areas toward the Klamath Falls monitor location.

On August 26, 2017, the Oakridge monitor measured peak PM_{2.5} concentrations of 89.5 µg/m³ in the early afternoon. The source of the smoke, as seen in Figure 13B, and the high PM_{2.5} concentrations at the monitor were fires in southern Oregon and California, which were carried by winds from the southwest. The HYSPLIT trajectory in Figure 13D provides evidence of this transport. On August 29, 2017, the Oakridge monitor measured concentrations well above 50 µg/m³ throughout most of the day (peaking at 128 µg/m³ at midday). The west-southwest winds appear to have transported considerable smoke from the wildfires to the south of the Oakridge monitor, as shown in the MODIS satellite image in Figure 14B. The wind rose in Figure 14C provides further evidence of the direction of the transported smoke. According to Figure 15A, September 1, 2017 had increasing PM_{2.5} concentrations throughout the day that peaked at 4pm. The southwest winds, as shown in Figure 15A, likely transported smoke from the fires south of Oakridge. On September 4, 2017, the Oakridge monitor measured concentrations well above 100 µg/m³ throughout most of the day (peaking at 383 µg/m³ around 3pm). The MODIS satellite image in Figure 16B shows considerable smoke buildup around the Oakridge monitor. The wind direction, primarily from the west and south most of the day, as shown in Figures 16A and 16C, provides further evidence that smoke would be transported from the wildfire areas to the Oakridge monitor location. On September 7, 2017, the Oakridge monitor recorded sustained PM_{2.5} concentrations above 50 µg/m³ throughout most of the day while the wind direction was primarily from the southwest, as shown in Figure 17A. A shift in the wind direction in early afternoon briefly lowered PM_{2.5} concentrations before southwest winds returned, lifting PM_{2.5} levels above 50 µg/m³ once again.

Smoke from wildfires appeared to contribute to high PM_{2.5} concentrations at the Oakridge monitor through September 16, 2017. A new wildfire, the Kelsey Creek Fire, had recently started 10 miles east of the Oakridge monitor. Along with the impact from the other fires more to the south, the shifts in the wind direction to the east (in the early morning and evening) likely transported smoke from the Kelsey Creek Fire to the Oakridge monitor.

Based on the Oregon DEQ's submission, the EPA concludes that there is a clear causal relationship between the wildfires and elevated PM_{2.5} concentrations at the Klamath Falls monitoring station on August 29, 2017 and September 4, 2017 and at the Oakridge monitoring station on August 26 and 29, 2017 and September 1, 4, 7, and 16, 2017.

- **The demonstration includes an analysis comparing the claimed event-influenced concentrations to concentrations at the same monitoring site at other times to support the “clear causal connection” requirement. 40 CFR 50.14(c)(3)(iv)(C).**

Oregon DEQ compared the event-influenced concentrations to concentrations from the same monitoring site over the course of multiple years and seasons to support its conclusion that the wildfires affected air quality. The analysis includes descriptive statistics and data charts for each area.

For Klamath Falls, monitor data analyzed from 2008-17 shows that the 24-hour PM_{2.5} concentrations in 2017 were significantly higher than the 2008-16 period, as shown in Table 9 and Figure 19 of the Oregon DEQ submission. Other than the event-influenced days in 2017, only days in 2015 that were also flagged as Exceptional Events had 24-hour PM_{2.5} concentrations above 40 µg/m³ during wildfire season (June 1 – September 30), as shown in Figure 19 of the Oregon DEQ submission.

Similar to Klamath Falls, monitor data analyzed for Oakridge from 2008-17 shows that the 24-hour PM_{2.5} concentrations in 2017 were significantly higher than the 2008-16 period, as shown in Table 10 and Figure 20 of the Oregon DEQ submission. Figure 20 of the Oregon DEQ submission shows that the event-influenced days in 2017 were the only 24-hour PM_{2.5} concentrations above 50 µg/m³ during wildfire season between 2008 and 2017.

- **The event satisfies the “not reasonably controllable and not reasonably preventable” criteria in 40 CFR 50.1(j); 40 CFR 50.14(b)(4), (b)(8), and (c)(3)(iv)(D).**

The Exceptional Event Rule states that “provided the Administrator determines that there is no compelling evidence to the contrary in the record, the Administrator will determine every wildfire occurring predominantly on wildland to have met the requirements identified in (c)(3)(iv)(D) of this section regarding the not reasonably controllable or preventable criterion.” (40 CFR 50.14(b)(4)).

The Oregon DEQ thoroughly documented through the conceptual model that there were extensive wildfires occurring in the Western U.S. and Canada. The Oregon DEQ also analyzed alternative sources that potentially could have contributed emissions and found that none were contributing significant or elevated emissions during the time of the event. The EPA is not aware of any information to the contrary. Therefore, based on 40 CFR 50.14(b)(4), the EPA determines that these wildfires were not reasonably controllable or preventable.

- **The event satisfies the “mitigation” criteria in 40 CFR 51.930.**

40 CFR 51.930 requires that a state requesting to exclude air quality data due to exceptional events must take appropriate and reasonable actions to protect public health from exceedances or violations of the NAAQS. At a minimum, the state must:

1. Provide for prompt public notification whenever air quality concentrations exceed or are expected to exceed an applicable ambient air quality standard;
2. Provide for public education concerning actions that individuals may take to reduce exposures to unhealthy levels of air quality during and following an exceptional event; and
3. Provide for the implementation of appropriate measures to protect public health from exceedances or violations of ambient air quality standards caused by exceptional events.

To protect the public health from exceedances or violations of the NAAQS, the Oregon DEQ helped to develop a wildfire response protocol, in coordination with the Lane Regional Air Pollution Authority,

the Oregon Health Authority, the Oregon Occupational Safety and Health Administration, the Oregon Emergency Management, the Oregon Department of Forestry, and the US Forest Service that outlines the state, federal, and local response to dangerous smoke levels impacting Oregon communities. The Oregon DEQ included a summary of the protocol's action areas and lead agency responsibilities as part of the submission.

The five general actions of the wildfire response protocol include: air monitoring, smoke forecasting and modeling, issuing health warnings, managing online website communications, and taking actions to protect public health. Measuring air quality allows these agencies to track ambient air levels in communities receiving the heaviest impact. Smoke forecasting and modeling provides advance notice of possible smoke concentrations to help communities prepare for smoke exposure. Issuing health warnings enables coordinated updates from environmental and public health agencies and provides a forum to communicate up-to-date health-related information. The Oregon Smoke Blog, local agency websites, and other social media communications provide the public with a "one-stop" website to share the status of wildfires, air quality levels, health risks, cleaner air locations, press releases, and other critical information. Finally, these agencies have authority to take appropriate measures to protect public health, such as canceling public events and closing schools, planning evacuations, or providing cleaner air spaces and shelters when smoke concentrations are at unhealthy levels for impacted communities.

The information in the Oregon DEQ's submission is sufficient to demonstrate that it has met the mitigation requirements of 40 CFR 51.930. The Oregon DEQ has not requested concurrence on three wildfire events/seasons within three years. Therefore, the mitigation plan requirement in 40 CFR 51.930(b) is not applicable at this time.

Conclusion

Based on the documentation submitted by Oregon DEQ on June 24, 2019, the EPA concurs with Oregon DEQ that the PM_{2.5} data values listed in Table 3 have regulatory significance and were due to wildfire exceptional events.

Table 3. 24-hr PM_{2.5} values at the Klamath Falls and Oakridge monitoring stations flagged by Oregon DEQ and concurred on by the EPA as meeting the Exceptional Event Criteria

Date	PM_{2.5} Concentration (µg/m³) Klamath Falls, AQS # 41-035-0004	PM_{2.5} Concentration (µg/m³) Oakridge, AQS # 41-039-2013
8/26/2017		42.2
8/29/2017	69.3	88.5
9/1/2017		86.2
9/4/2017	102.0	200.0
9/7/2017		66.9
9/16/2017		40.3

The information and analyses presented in Oregon DEQ's exceptional event demonstration package provided weight of evidence sufficient for the EPA's concurrence on the flagged data from the Klamath Falls and Oakridge monitoring stations on the dates listed above in Table 3 and as described in this

document. Accordingly, the EPA is placing a concurrence indicator in the EPA's AQS database for these dates at this monitor.

The EPA's concurrence is a preliminary step in the regulatory process for actions that may rely on the dataset containing the event-influenced data and does not constitute final agency action. When the EPA takes a regulatory action that is affected by exclusion of the PM_{2.5} data at the Klamath Falls monitoring station on August 29 and September 4, 2017, and at the Oakridge monitoring station on August 26 and 29, 2017, and September 1, 4, 7, and 16, 2017, the EPA intends to publish notice of its proposed action in the Federal Register. The EPA's concurrence letter and this accompanying technical support document will be included in the record as part of the technical basis for that proposal. When the EPA issues that regulatory action, it will be a final agency action subject to judicial review.